```
  Best Local Similarity   28.0%;  Pred. No. 6.5e-37;
  Matches  127;  Conservative   70;  Mismatches  189;  Indels   67;  Gaps   14;

Qy      10 LRMKVDGKWLYLSEELVKKHPGGAV-IEQYRNSDATHIFHAFHEGSSQAYKQLDLLKKHG 68
           | : : || |   : || ||||: ::     : |  | |||  |:
Db      23 LWISIQGK-AYDVSDWVKDHPGGSFPLKSLAGQEVTDAFVAFHPASTW------------ 69

Qy      69 EHDEFLEKQLEKRLDKVDINVSAYDVSVAQEKKMVES--FEKLRQKLHDDGLMKANETYF 126
                   | |||        | ||::  |:      ||  :  |:|         : :
Db      70 -----------KNLDKFFTGYYLKDYSVSEVSKVYRKLVFEFSKMGLYD------KKGHI 112

Qy     127 LFKAISTLSIMAFAFYLQYLG--------WYITSACLLALAWQQFGWLTHEFCHQQPTKN 178
           :|   :|| :|  | :   |         :: | ||:   | | ||: |:  |     :
Db     113 MF---ATLCFIAMLFAMSVYGVLFCEGVLVHLFSGCLMGFLWIQSGWIGHDAGHYMVVSD 169

Qy     179 RPLNDTISLFFGNFLQGFSRDWWKDKHNTHHAATNVIDHDGDIDLAP-------LFAFIP 231
             ||  : :|  | | | |  |||  || || | | :::| |:   |         |  :
Db     170 SRLNKFMGIFAANCLSGISIGWWKWNHNAHHIACNSLEYDPDLQYIPFLVVSSKFFGSLT 229

Qy     232 GDLCKYKASFEKAILKIVPYQHLYFTAMLPMLRFSWTGQSVQWVFKENQMEYKVYQRNAF 291
             : : :|:      | |||  |  ::   | :   ||:  :  :  : |:  :
Db     230 SHFYEKRLTFDSLSRFFVSYQHWTFYPIMCAARLNMYVQSLIMLLTKRNVSYRAQE---- 285

Qy     292 WEQATIVGHWAW-VFYQLFL--LPTWPLRVAYFIISQMGGGLLIAHVVTFNHNSVDKYPA 348
             ::|   : ::| | :  || |  |: : | |     |:       : || |   |
Db     286 -----LLGCLVFSIWYPLLVSCLPNWGERIMFVIASLSVTGMQQVQ-FSLNHFSSSVYVG 339

Qy     349 NSRILNNFAALQILTTRNMTPSPFIDWLWGGLNYQIEHHLFPTMPRCNLNACVKYVKEWC 408
           :  ||:   |   | :::  |::||  ||| :|||||||| ||||||     || | |
Db     340 KPK-GNNWFEKQTDGTLDISCPPWMDWFHGGLQFQIEHHLFPKMPRCNLRKISPYVIELC 398

Qy     409 KENNLPYLVDDYFDGYAMNLQQLKNMAEHIQAK 441
           |::||||    :     | |: |:| |  :||:
Db     399 KKHNLPYNYASFSKANEMTLRTLRNTA--LQAR 429


RESULT  11
US-08-366-779-5
; Sequence 5, Application US/08366779
; Patent No. 5614393
;  GENERAL INFORMATION:
;    APPLICANT:  Thomas, Terry L.
;    APPLICANT:  Reddy, Avutu S.
;    APPLICANT:  Nuccio, Michael
;    APPLICANT:  Freyssinet, Georges L.
;    APPLICANT:  Nunberg, Andrew N.
;    TITLE OF INVENTION:  PRODUCTION OF GAMMA LINOLENIC ACID BY A
;    TITLE OF INVENTION:  DELTA 6-DESATURASE
;    NUMBER OF SEQUENCES:  25
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Scully, Scott, Murphy & Presser
;      STREET:  400 Garden City Plaza
;      CITY:  Garden City
;      STATE:  New York
;      COUNTRY:  United States
;      ZIP:  11530
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/366,779
;      FILING DATE:  30-DEC-1994
;      CLASSIFICATION:  800
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Presser, Leopold
;      REGISTRATION NUMBER:  19,827
;      REFERENCE/DOCKET NUMBER:  8383ZYXW
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (516) 742-4343
;      TELEFAX:  (516) 742-4366
;      TELEX:  230 901 SANS UR

;  INFORMATION FOR SEQ ID NO:  5:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  448 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA (genomic)
US-08-366-779-5


  Query Match             18.6%;  Score 448.5;  DB 1;  Length 448;
  Best Local Similarity   27.9%;  Pred. No. 4e-36;
  Matches  127;  Conservative   71;  Mismatches  186;  Indels   71;  Gaps   15;

Qy      10 LRMKVDGKWLYLSEELVKKHPGGAV-IEQYRNSDATHIFHAFHEGSSQAYKQLDLLKKHG 68
           | : : || |   : || ||||: ::     : |  | |||  |:
Db      23 LWISIQGK-AYDVSDWVKDHPGGSFPLKSLAGQEVTDAFVAFHPASTW------------ 69

Qy      69 EHDEFLEKQLEKRLDKVDINVSAYDVSVAQ----EKKMVESFEKLRQKLHDDGLMKANET 124
                   | |||        | ||::    :|:|  | |:   |:|       :
Db      70 -----------KNLDKFFTGYYLKDYSVSEVSKDYRKLVFEFSKM--GLYD------KKG 110

Qy     125 YFLFKAISTLSIMAFAFYLQYLG--------WYITSACLLALAWQQFGWLTHEFCHQQPT 176
           : :|   :||  :|  | :   |              :: | ||:   | | ||: |:  |
Db     111 HIMF---ATLCFIAMLFAMSVYGVLFCEGVLVHLFSGCLMGFLWIQSGWIGHDAGHYMVV 167

Qy     177 KNRPLNDTISLFFGNFLQGFSRDWWKDKHNTHHAATNVIDHDGDIDLAP-------LFAF 229
           :  || : :|  | | | |  |||  || || | | :::| |:   |         |
Db     168 SDSRLNKFMGIFAANCLSGISIGWWKWNHNAHHIACNSLEYDPDLQYIPFLVVSSKFFGS 227

Qy     230 IPGDLCKYKASFEKAILKIVPYQHLYFTAMLPMLRFSWTGQSVQWVFKENQMEYKVYQRN 289
           :     : : :|:      | |||  |  ::   | :   ||:  :  :  : |:  :
Db     228 LTSHFYEKRLTFDSLSRFFVSYQHWTFYPIMCAARLNMYVQSLIMLLTKRNVSYRAQE-- 285

Qy     290 AFWEQATIVGHWAW-VFYQLFL--LPTWPLRVAYFIISQMGGGLLIAHVVTFNHNSVDKY 346
             ::|   : ::| | :  || |  |: : | |     |:       : || |   |
Db     286 -------LLGCLVFSIWYPLLVSCLPNWGERIMFVIASLSVTGMQQVQ-FSLNHFSSSVY 337

Qy     347 PANSRILNNFAALQILTTRNMTPSPFIDWLWGGLNYQIEHHLFPTMPRCNLNACVKYVKE 406
           :  ||:   |   | :::  |::||  ||  :|||||||| ||||||     || |
Db     338 VGKPK-GNNWFEKQTDGTLDISCPPWMDWFHGGSQFQIEHHLFPKMPRCNLRKISPYVIE 396

Qy     407 WCKENNLPYLVDDYFDGYAMNLQQLKNMAEHIQAK 441
           ||::|||    :     | |: |:| |  :||:
Db     397 LCKKHNLPYNYASFSKANEMTLRTLRNTA--LQAR 429


RESULT  12
US-08-789-936-5
; Sequence 5, Application US/08789936
; Patent No. 5789220
;  GENERAL INFORMATION:
;    APPLICANT:  Thomas, Terry L.
;    APPLICANT:  Reddy, Avutu S.
;    APPLICANT:  Nuccio, Michael
;    APPLICANT:  Freyssinet, Georges L.
;    APPLICANT:  Nunberg, Andrew N.
;    TITLE OF INVENTION:  PRODUCTION OF GAMMA LINOLENIC ACID BY A
;    TITLE OF INVENTION:  DELTA 6-DESATURASE
;    NUMBER OF SEQUENCES:  25
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Scully, Scott, Murphy & Presser
;      STREET:  400 Garden City Plaza
;      CITY:  Garden City
;      STATE:  New York
;      COUNTRY:  United States
;      ZIP:  11530
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/789,936
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			$
29,551-5 ★	**Methanethiol,** 99.5 + % [*74-93-1*] (methyl mercaptan)..... CH$_3$SH FW 48.11 mp -123° bp 6° *Beil.* 1,288 *Merck Index* 11,5867 *FT-IR* 1(3),335B *Safety* 2,2230D *RTECS#* PB4375000 Disp. Y *FLAMMABLE GAS CORROSIVE* Stainless steel control valve Z14,695-1 or either of stainless steel regulators Z14,850-4 and Z14,851-2 is recommended. (*Packaged in lecture bottle*)	227g	134.30
	Methan-d_3-ol, see 34,385-4, Methyl-d_3 alcohol		
	Methanol, see Methyl alcohol		
	Methenamine, see Hexamethylenetetramine		
	Methimazole, see 2-Mercapto-1-methylimidazole		
	Methionamine, see A1,790-0, *N*-Acetyl-DL-methionine		
85,590-1 ★	**D-Methionine,** 99 + % [*348-67-4*] [(*R*)-(-)-methionine]..... CH$_3$SCH$_2$CH$_2$CH(NH$_2$)CO$_2$H FW 149.21 mp 273° (dec.) [α]^{23} -21.3° (c = 0.8, 0.2*N* HCl) *NMR* 2(1),501A *FT-IR* 1(1),594B *Safety* 2,2233D *RTECS#* PD0455000 Disp. A	5g 25g	7.05 25.90
M885-1 ★	**DL-Methionine,** 99% [*59-51-8*]..... CH$_3$SCH$_2$CH$_2$CH(NH$_2$)CO$_2$H FW 149.21 mp 280° (dec.) *Beil.* 4(2),938 *Merck Index* 11,5896 *NMR* 2(1),500D *FT-IR* 1(1),593A *Safety* 2,2234A *RTECS#* PD0456000 Disp. A	2.5g 100g 500g	4.25 5.20 13.30
29,915-4	**L-Methionine-*methyl*-^{13}C-*methyl*-d_3,** 99 atom % ^{13}C, 99 atom % D..... [*73488-65-0*] ^{13}CD$_3$SCH$_2$CH$_2$CH(NH$_2$)CO$_2$H FW 153.23 [α]^{18} + 22° (c = 0.8, 6*N* HCl) *Safety* 2,2233C Disp. A *HYGROSCOPIC* (*Packaged in screw-cap bottles*)	250mg 1g	130.95 361.90
29,914-6	**L-Methionine-*methyl*-^{13}C,** 99 atom % ^{13}C [*49705-26-2*]..... ^{13}CH$_3$SCH$_2$CH$_2$CH(NH$_2$)CO$_2$H FW 150.21 [α]^{19} + 23.5° (c = 0.8, 6*N* HCl) *Safety* 2,2233A Disp. A (*Packaged in screw-cap bottles*)	250mg 1g	77.20 213.25
30,061-6	**L-Methionine-*methyl*-d_3,** 99 + atom % D [*13010-53-2*]..... CD$_3$SCH$_2$CH$_2$CH(NH$_2$)CO$_2$H FW 152.24 mp 273-275° (dec.) [α]^{18} + 22° (c = 0.8, 6*N* HCl) *Safety* 2,2233B Disp. A *HYGROSCOPIC*	1g 5g	114.10 377.80
15,169-6 ★	**L-Methionine,** 98 + % [*63-68-3*] [(*S*)-(+)-methionine]..... CH$_3$SCH$_2$CH$_2$CH(NH$_2$)CO$_2$H FW 149.21 mp 284° (dec.) [α]^{23} + 24.3° (c = 8, 6*N* HCl) *Beil.* 4(2),938 *Merck Index* 11,5896 *NMR* 2(1),501B *FT-IR* 1(1),594C *Safety* 2,2232D *RTECS#* PD0457000 Disp. A	25g 100g	8.15 22.00
22,067-1	**L-Methionine ethyl ester hydrochloride,** 99% [*2899-36-7*]..... CH$_3$SCH$_2$CH$_2$CH(NH$_2$)CO$_2$C$_2$H$_5$·HCl FW 213.73 mp 90-92° [α]^{25} + 21° (c = 2, C$_2$H$_5$OH) *NMR* 2(1),569D *FT-IR* 1(1),677A *Safety* 2,2235B Disp. A	10g 50g	26.95 78.30
86,040-9	**L-Methionine methyl ester hydrochloride,** 99 + % [*2491-18-1*]..... CH$_3$SCH$_2$CH$_2$CH(NH$_2$)CO$_2$CH$_3$·HCl FW 199.70 mp 151-153° [α]^{22} + 25.9° (c = 1, H$_2$O) *FT-IR* 1(1),676D *Safety* 2,2235C Disp. A	5g 25g	11.80 36.85
85,126-4	**DL-Methionine sulfoxide,** 98% [*454-41-1*]..... CH$_3$SOCH$_2$CH$_2$CH(NH$_2$)CO$_2$H FW 165.21 mp 232° (dec.) *NMR* 2(2),782A *FT-IR* 1(1),880A *RTECS#* ES7120000 Disp. A	5g	10.50
85,589-8	**L-Methionine sulfoximine,** 99% [*15985-39-4*]..... CH$_3$S(O)(=NH)CH$_2$CH$_2$CH(NH$_2$)CO$_2$H FW 180.23 mp > 210° (dec.) [α]^{25} + 12.8° (c = 1, H$_2$O) *NMR* 2(2),805C *FT-IR* 1(1),905A *RTECS#* WS3560000 Disp. A Inhibitor of glutamine synthetase and γ-glutamylcysteine synthetase. *J. Biol. Chem.,* **248,** 3997, 6684 (1973). Induces seizures. *Nature New Biol.,* **230,** 253 (1971).	500mg 1g 5g	32.50 51.00 203.90
86,023-9	**(*S*)-(-)-Methioninol,** 98% [*2899-37-8*] (L-2-amino-4-methylthio-1-butanol) CH$_3$SCH$_2$CH$_2$CH(NH$_2$)CH$_2$OH FW 135.23 n_D^{25} 1.5216 Fp > 230°F(110°C) [α]^{21} -12.7° (c = 1.4, C$_2$H$_5$OH) *FT-IR* 1(3),440A *Safety* 2,2236B Disp. A	250mg 1g	17.90 47.60
	Methone, see D15,330-3, 5,5-Dimethyl-1,3-cyclohexanedione		
	Methotrexate, see 22,394-8, L-(+)-Amethopterin		